



FIG. 2

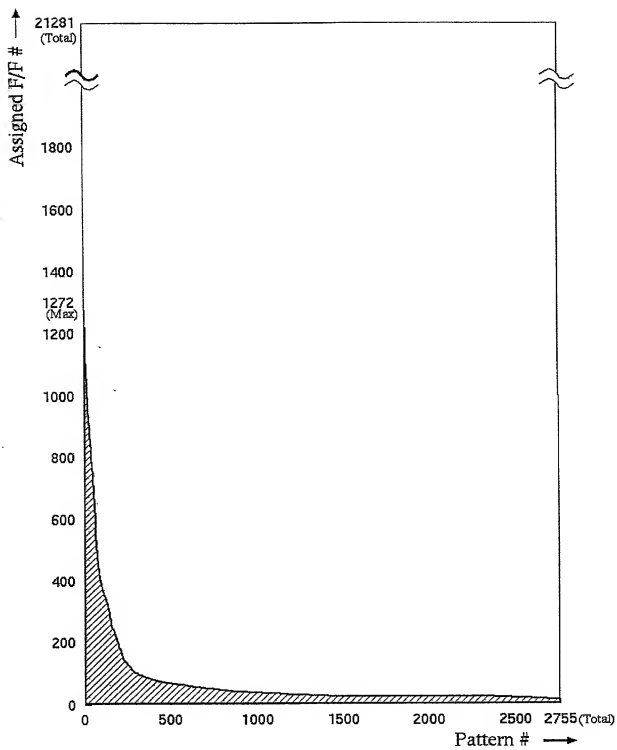


FIG. 3

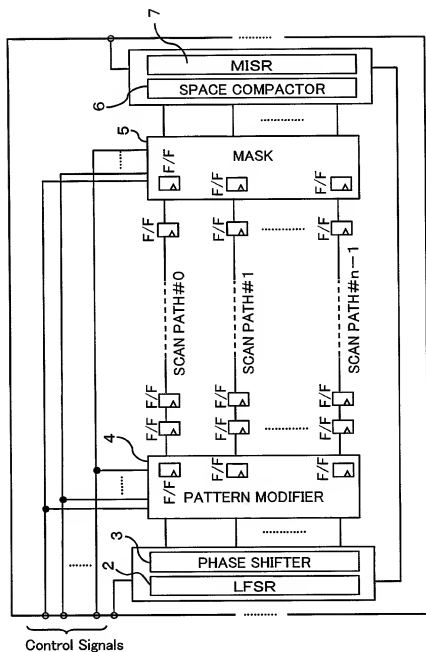
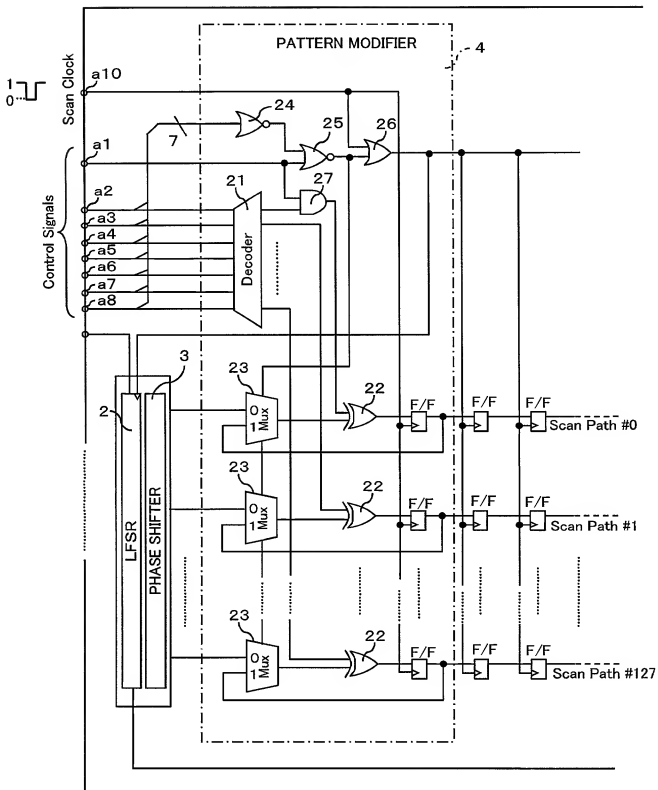


FIG. 4



# FIG. 5

SCAN PATH NUMBER	RANDOM NUMBER	ATPG
0th(#0)	0 1 0 1 0	— 1 — —
1st(#1)	1 0 1 0 1	1 <span style="border: 1px dashed black; padding: 2px;">1</span> 1 0 1
2nd(#2)	0 1 0 1 0	— — 0 —
3rd(#3)	1 0 1 0 1	— — 1 <span style="border: 1px dashed black; padding: 2px;">1</span> —
4th(#4)	0 1 0 1 0	— <span style="border: 1px dashed black; padding: 2px;">0</span> — —
⋮	⋮	⋮
126th(#126)	1 0 1 0 1	— 0 — 0 —
127th(#127)	0 1 0 1 0	— <span style="border: 1px dashed black; padding: 2px;">0</span> — 1 —

FIG. 6

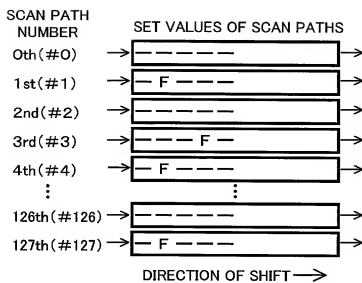


FIG. 7

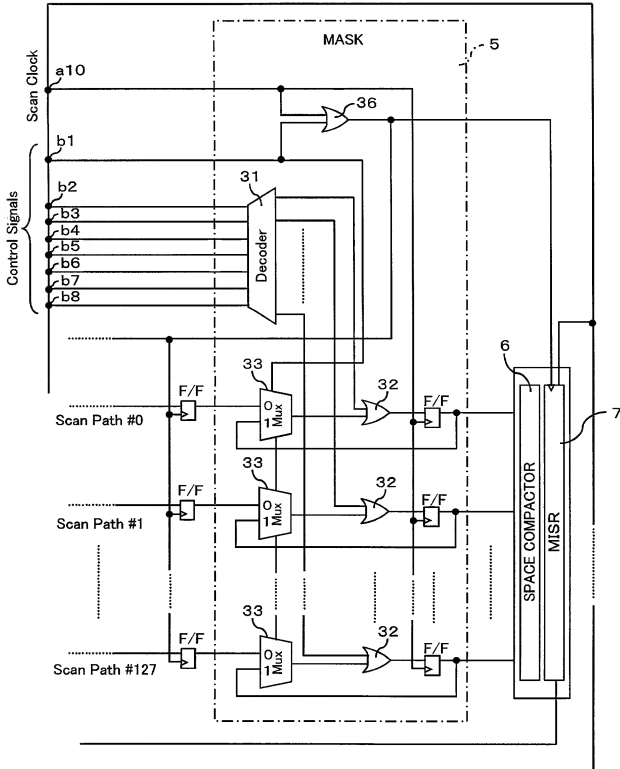


FIG. 8

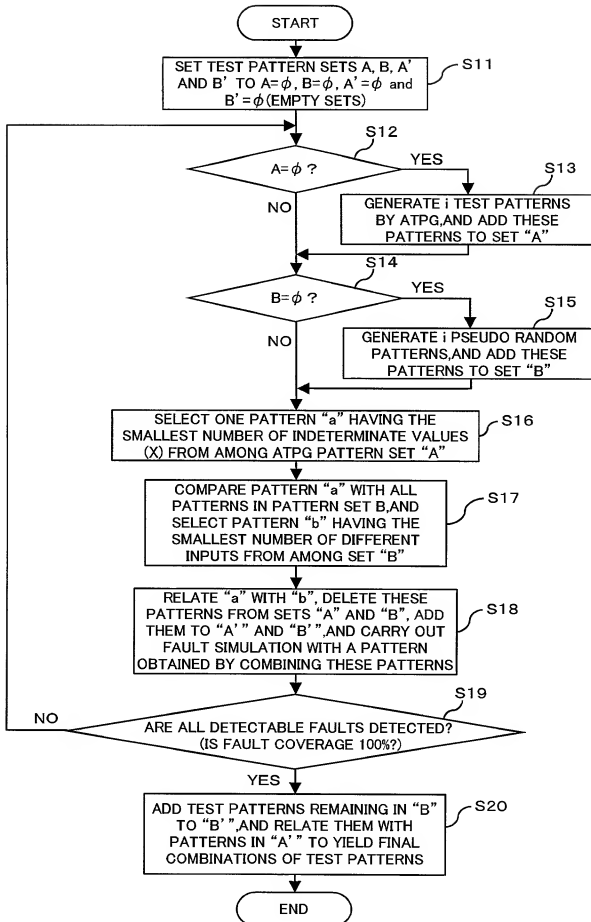




FIG. 9

1X000X11X(DP1) 011010110(RP1)	→	110000110(m=3)
X01XX1XXX(DP2) 001010101(RP2)	→	001011101(m=1)
0XXX1X1X0(DP3) 110110111(RP3)	→	010110110(m=2)

FIG. 10

1X000X11X(DP1) 110110111(RP3)	→	110110111(m=2)
0XXX1X1X0(DP3) 011010110(RP1)	→	011010110(m=0)
X01XX1XXX(DP2) 001010101(RP2)	→	001011101(m=1)

# FIG. 11

ATPG PATTERN	PSEUDO RANDOM PATTERN	MODIFIED TEST PATTERN
1X000X11X(DP1) →	011010110(RP1) →	110000110(m=3)
X01XX1XXX(DP2) →	001010101(RP2) →	001011101(m=1)
0XXX1X1X0(DP3) →	110110111(RP3) →	010110110(m=2)
01XXX0XXX(DP4) →	100101011(RP4) →	010100011(m=3)
1XXX11110(DP5) →	000011101(RP5) →	100011110(m=3)
10XXXXXXX(DP6) →	100110011(RP6) →	100110011(m=0)

# FIG. 12

ATPG PATTERN	PSEUDO RANDOM PATTERN	MODIFIED TEST PATTERN
1X000X11X(DP1) →	011010110(RP1) →	011010110(m=0)
X01XX1XXX(DP2) →	001010101(RP2) →	001011101(m=1)
0XXX1X1X0(DP3) →	110110111(RP3) →	110000111(m=2)
01XXX0XXX(DP4) →	100101011(RP4) →	100101110(m=2)
1XXX11110(DP5) →	000011101(RP5) →	010010101(m=2)
10XXXXXXX(DP6) →	100110011(RP6) →	100110011(m=0)

FIG. 13

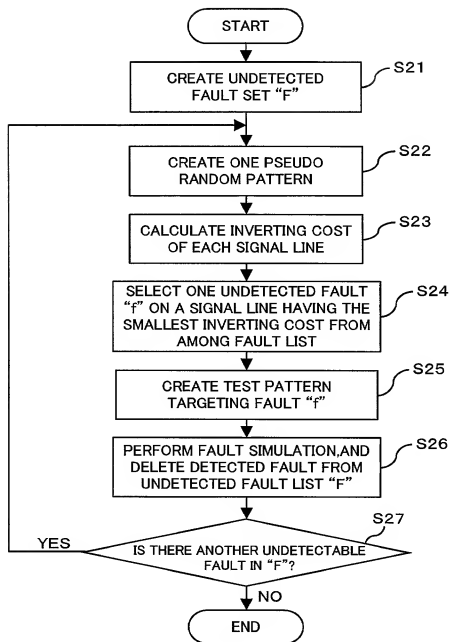


FIG. 14

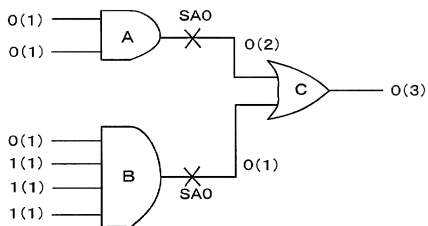
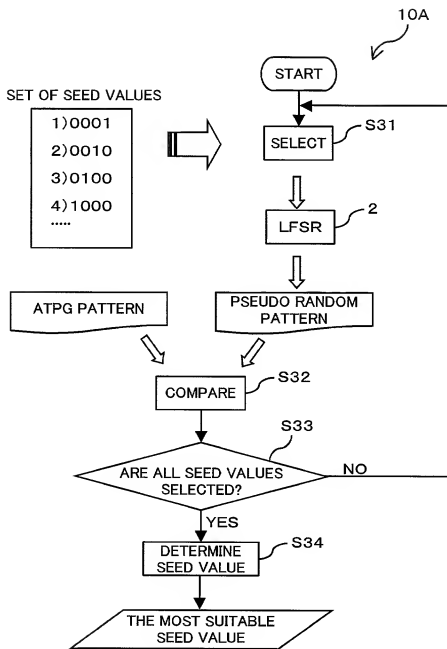


FIG. 15



10000000-12000000

FIG. 16

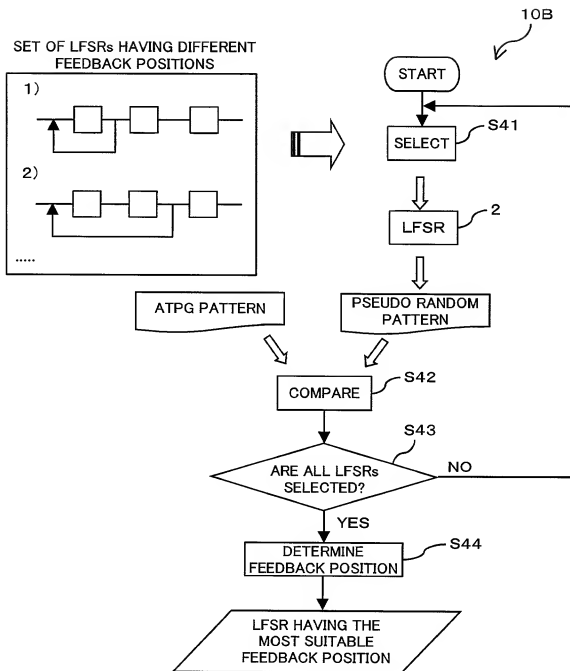


FIG. 17

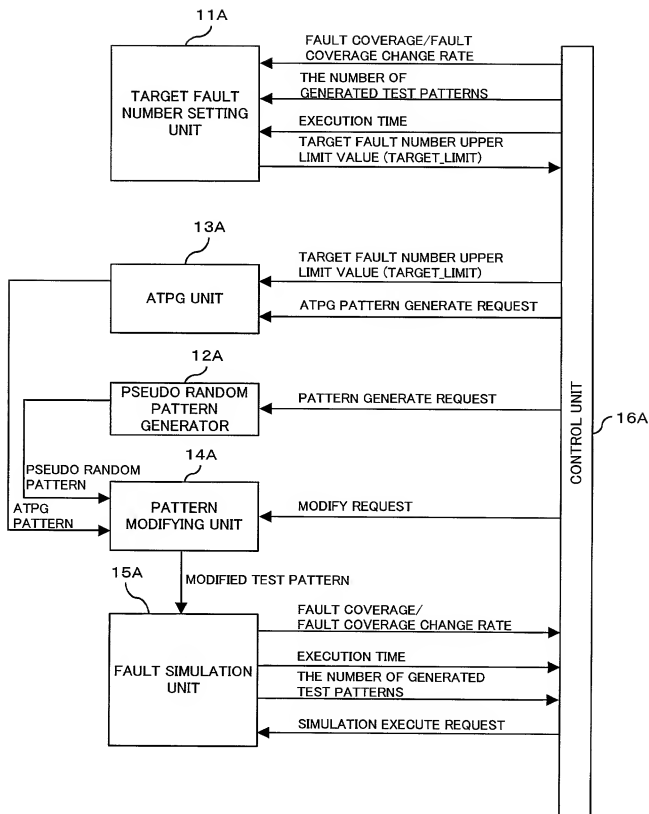


FIG. 18

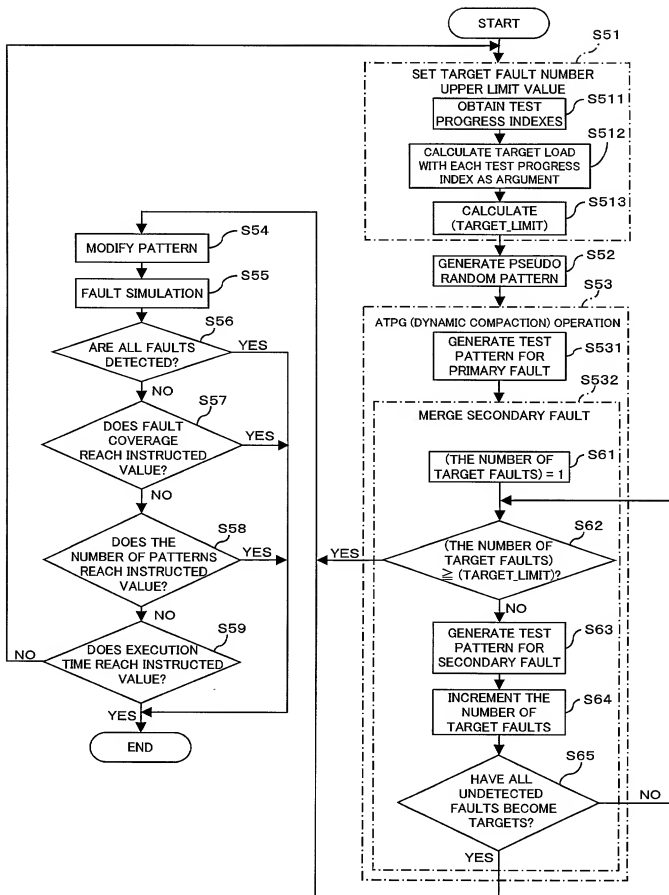




FIG. 19

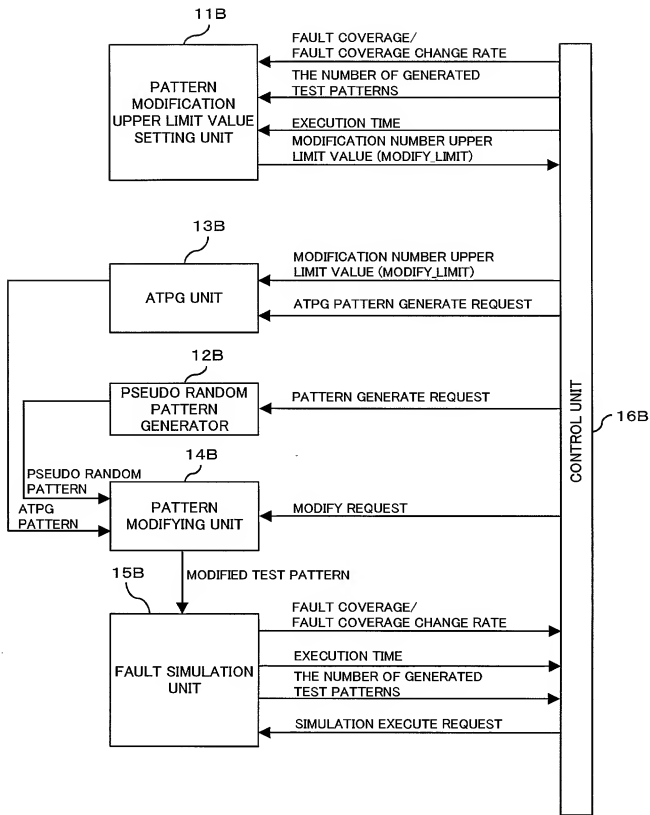


FIG. 20

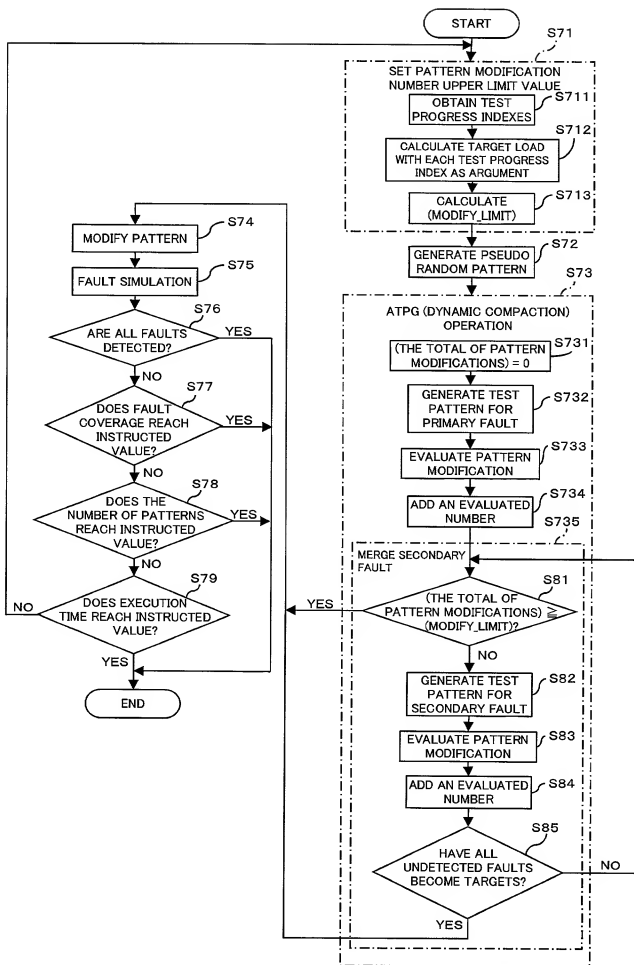


FIG. 21

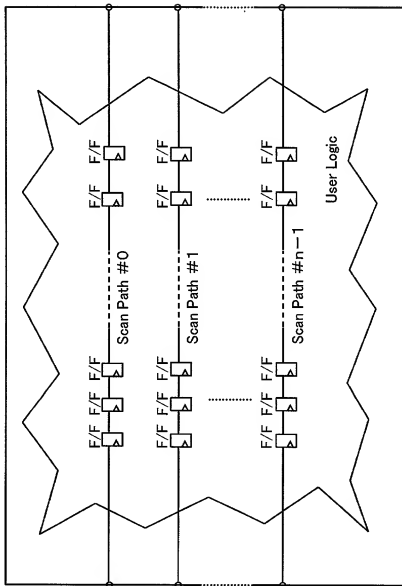


FIG. 22

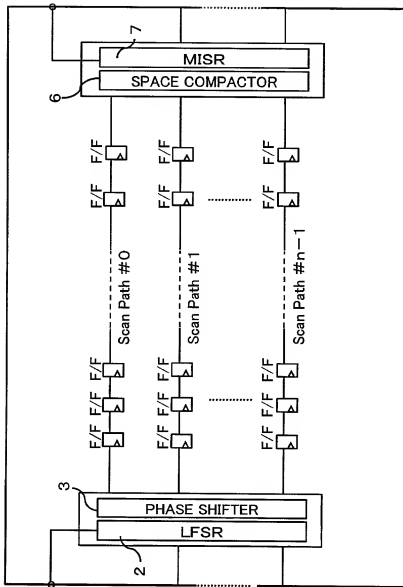


FIG. 23

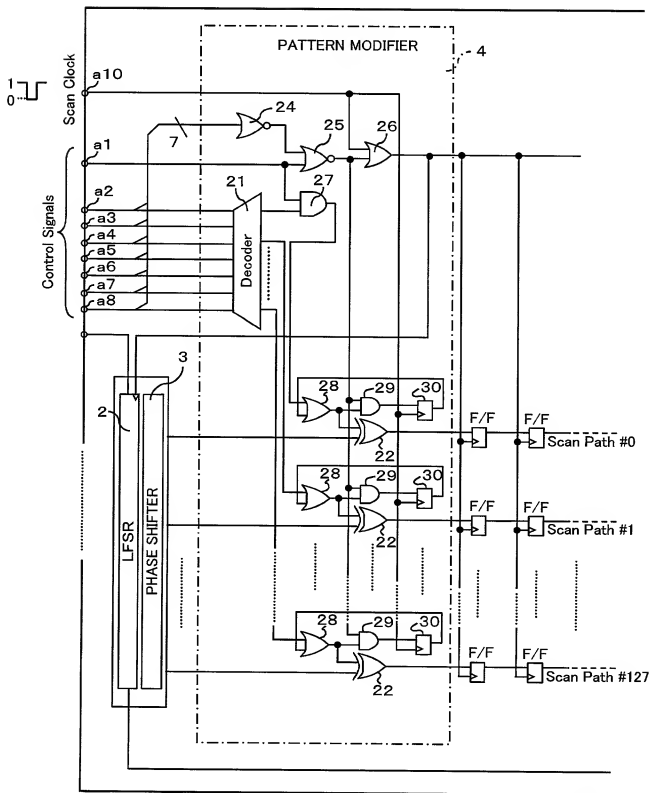


FIG. 24

